



**State of Alaska Cyber Security &  
Critical Infrastructure  
Cyber Advisory**

**January 13, 2015**

*The following cyber advisory was issued by the State of Alaska and was intended for State government entities. The information may or may not be applicable to the general public and accordingly, the State does not warrant its use for any specific purposes.*

**ADVISORY NUMBER:**

SA2016-005

**DATE(S) ISSUED:**

01/12/2016

**SUBJECT:**

Cumulative Security Update for Microsoft Edge (MS16-002)

**OVERVIEW:**

Multiple vulnerabilities have been discovered in Microsoft Edge that could allow for remote code execution. Microsoft Edge replaced Internet Explorer as the default browser on Windows 10. Successful exploitation of these vulnerabilities could result in an attacker gaining the same privileges as the logged on user. Depending on the privileges associated with the user, an attacker could then install programs; view, change, or delete data; or create new accounts with full user rights.

**THREAT INTELLIGENCE:**

There are no reports of these vulnerabilities being exploited in the wild.

**SYSTEM AFFECTED:**

- Windows 10

**RISK:**

**Government:**

- Large and medium government entities: **High**
- Small government entities: **High**

**Businesses:**

- Large and medium business entities: **High**
- Small business entities: **High**

**Home users: High**

**TECHNICAL SUMMARY:**

Multiple vulnerabilities exist in Microsoft Edge due to the way objects in memory are improperly accessed. These vulnerabilities could corrupt memory in such a way that an attacker could execute arbitrary code in the context of the current user. The vulnerabilities are as follows:

- Memory Corruption Vulnerability (CVE-2016-0003)
- Scripting Engine Memory Corruption Vulnerability (CVE-2016-0024)

These vulnerabilities could allow an attacker to execute remote code by luring a victim to a malicious website. Successful exploitation of these vulnerabilities could result in an attacker gaining the same rights as the current user. Depending on the privileges associated with the user, an attacker could then install programs; view, change, or delete data; or create new accounts with full user rights.

**RECOMMENDATIONS:**

We recommend the following actions be taken:

- Apply appropriate patches provided by Microsoft to vulnerable systems immediately after appropriate testing.
- Run all software as a non-privileged user (one without administrative privileges) to diminish the effects of a successful attack.
- Remind users not to visit un-trusted websites or follow links provided by unknown or un-trusted sources.
- Inform and educate users regarding the threats posed by hypertext links contained in emails or attachments, especially those from un-trusted sources.

**REFERENCES:****Microsoft:**

<https://technet.microsoft.com/en-us/library/security/ms16-002.aspx>

**CVE:**

<http://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0003>

<http://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-0024>